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File No.: 2683/74619

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Satyan G. Pitroda

Group No.: 3628

Serial No.: 09/372,365

Confirmation No. 1321

Filed: August 11, 1999

Examiner: N. Nguyen

For: SYSTEM AND METHODS FOR
SERVICING ELECTRONIC
TRANSACTIONS

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:

Date _____ Registration No.: 39,724
Attorney for Applicant(s) _____

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Satyan G. Pitroda, declare unequivocally:

1. That I am a named co-inventor of U.S. Patent Application Serial No. 09/372,365, filed on August 11, 1999.
2. That I conceived of the subject matter of Application Serial No. 08/929,267 at least by April 7, 1999. As of April 7, 1999, I had prepared draft drawings comprising Figures 1-10 and a draft written description of the invention to send to my patent attorney. On April 13, I had the drawings faxed to my patent attorney. Those draft drawings and draft written description are attached behind Tab A.
3. That the draft drawings and a draft written description include the subject matter claimed in the presently pending application. For example, Fig. 3 shows an electronic commerce server (WSP e-Commerce server) having a processor, a data storage medium

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(WSP archives), and a network port. Fig. 3 also shows an internal server (WSP Business Processes), including an internal database (WSP Internal Databases) and a firewall separating the internal server from the electronic transaction server.

The written description (page 3) describes the WSP Commerce server as being configured to create a transaction service provider archive on the data storage medium (database of Wallet Client information), the transaction service provider archive including client information including personal information, account information corresponding to a plurality of accounts associated with the client, and transactional information corresponding to a plurality of transactions conducted by the client (see pages 4-7). The WSP Commerce server is also described as allowing the client to designate as confidential a first portion of the transaction service provider archive, including client identifying information, allow the client to designate as non-confidential a second portion of the transaction service provider archive. See pages 3-4 ("users want to have a more tighter control over their personal information, allowing them the upper hand when it comes to dealing with these Service Institutions, allowing only so much information to slip away for the product or service they desire," and describing the WSP as an "intermediary, someone that is positioned between the user and these Service Institutions, allowing the user to maintain their anonymity, but at the same time giving them precise information regarding the product or service they desire. The key purpose of this intermediary is to eventually allow the user to make a choice amongst the various vendors for a particular product or service, without being bombarded by the vendors directly.").

The WSP Commerce server is also described as providing a plurality of vendors with access to the a non-confidential portion of the database of client information while denying access for the plurality of vendors to the first portion of the transaction service provider archive.

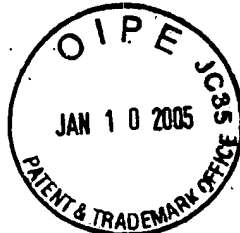
See also, p. 5 ("The WSP guarantees the absolute confidentiality of all information they have access to about their clients. Controlled and partial access to this information would only be given to the Service Institutions on prior consent by the user to fulfill a specific objective, such as conducting a purchase or obtaining a service on behalf of the WSP client."), p. 7 ("Thus based on the profile created and various services offered by the WSP, the WSP is in the unique position to safeguard the interests of the clients by isolating their identity from the Service Institutions, and at the same time giving them access to the products, services, promotions and advertising they desire."); see also, Fig. 5 and its related description:

4. That during the period of time from prior to April 7, 1999 until the filing date of August 11, 1999, I exercised diligence by reviewing subsequent drafts of the patent application and assisting in the filing of patent application.

5. That all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further, these statements were made with the knowledge that willful, false statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified application or any patent issuing thereon.

Satyan G. Pitroda

Date



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File No.: 2683/74619

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Satyan G. Pitroda

Group No.: 3628

Serial No.: 09/372,365

Confirmation No. 13218

Filed: August 11, 1999

Examiner: N. Nguyen

For: SYSTEM AND METHODS FOR
SERVICING ELECTRONIC
TRANSACTIONS

CERTIFICATE OF MAILING

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Date

Registration No. 2683/74619

Attorney for Applicant

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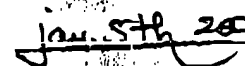
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 Saryan G. Pineda

 Jan. 5th 2005 Date

Wallet Service Provider

Abstract

The Wallet Service Provider (WSP) provides various services to SAM Wallet users (or UET Card). The SAM Wallet (Wallet) is a **Smart, Active & Multipurpose** Internet appliance that offers to its users, an assortment of basic and value added services. The concept of the Universal Electronic Transaction Card (UET Card) has already been discussed in detail and disclosed in Patent # 5,590,038. To summarize, the UET card is a handheld electronic device, capable of storing various images and interfaces electronically, of Credit Cards, Health Cards, Membership & Identification Cards, and any other “plastic” which typically is carried around in a wallet. The UET card, in one embodiment, allows the user to interface with the device through a touch sensitive LCD screen, the UET card interfacing with various POS, ATM etc. terminals through either the conventional magnetic stripe reader, bar code reader or the various commercially used smart card readers. Alternately, the UET card is also capable of interfacing with POS terminals and other devices such as printers, servers etc. through Proximity RF, or Infrared transceivers. The UET card is capable of storing the password, login and security details, transaction and promotional details surrounding all the “plastic” that it carries.

The UET card essentially allows the user, the Service Industry (the term Service Industry shall be defined in context with this disclosure) and the various vendors associated with the consumer industry, more convenience, more security, less paperwork and more value added services. The UET card also allows the users to customize and add on functionality to the wallet as per their own specific requirements. Essentially, the UET card is an “Information Organizer”, which in the present environment goes beyond the conventional Personal Information Managers. The UET card will allow the user to store, organize and eventually allow more efficient use of their personal information. In today’s world, Information is Power – vendors and merchants go to tremendous pains and expenses to obtain information about their markets, in the process risking loss of potential customers and eventually their own profitability. In a similar context, the user goes to great pains and expenses to gather information about products, services and vendors. The common denominator is Information, and with the UET card, the user has a device that simplifies the procurement, storage and processing of this information. One key aspect though that goes beyond the scope of the UET card, is the “Interfacing” with various Merchants, Vendors and Service Industry. It is the purpose of this patent to describe such an Information Interface System which would allow the user, equipped with a UET card, or any other handheld computer with similar functionality, to use Information more efficiently, in the process greatly enhancing their overall lifestyle, productivity, efficiency and profitability.

Description

The Smart, Active, Multipurpose Wallet (Wallet) or the UET Card is the palmtop Internet appliance, providing basic and value added services, that will interface with the Wallet Service Provider (WSP). As mentioned earlier, any other handheld or palmtop computers equipped with the functionality (hardware and software) similar to the Wallet, may be used with the Wallet Service Provider (Universal Electronic Transaction Card Service Provider). As described earlier, it is the purpose of this patent to define an Information Interface or Mediator which would act as a buffer between the users and the Service Institutions, and at the same time provide the requisite information and services to the users and Service Institutions. The WSP is described as one such Information Mediator or Interface.

Figure 1 shows an overview of the structure of the WSP forming at interface between the user or the Wallet Clients, and various Service Institutions (the term "Service Institutions", for the purpose of this patent would be used as defined here) that include, but are not restricted to:

- a) Banks & Financial Institutions
- b) Health Services, Hospitals and related Organizations
- c) Manufacturers, Vendors and Service Providers
- d) Merchants and Retail Outlets
- e) Various Government Agencies and other institutions, such as Universities etc.

The Wallet as described earlier is capable of interfacing with personal computers, printers, point of sale terminals, ATMs etc., either through the conventional magnetic and bar code readers, smart card (ICC) readers, Infrared or Proximity RF transceivers. Thus from a physical connectivity standpoint, the Wallet would connect to the WSP either directly through what is described in the figures as a Network, or through a PC and then through a Network. The Network could be any of the prevailing Public Switched Telephone Networks (PSTN), Public Switched Data Networks (PSDN), Virtual Private Networks (VPN), Wireless Networks etc., or any other network which allows dial up facilities or/and digital packet switching as per the existing protocols and standards.

Figure 2 depicts an environment that already exists in terms of physical connectivity, used by merchants, vendors, banks, financial, health and government institutions. Figure 2 shows the Service Institutions connected to their respective POS, ATMs, or any related Terminal Equipment (e.g. this would include the terminals used by a Motor Vehicle Inspector at the innumerable DMV locations across the country) through the same Network described earlier. The WSP would also connect to these various Service Institutions through the same Network. The user would be able to use their Wallets at these existing POS terminals and vendor specific terminals – for instance to make a purchase using their MasterCard provided by Citibank, or alternately use a Visa card, American Express, Diners Club, Discover card etc. The user in turn would also connect to the WSP through the same Network. Thus this would complete the loop between the user or Wallet Client, and the existing terminals provided by the various Service Institutions, with the WSP playing the role of an Information Mediator, providing exclusive services to the Wallet Clients and the Service Institutions.

The Wallet Service Provider, in one embodiment, may be seen to consist of a network of e-Commerce servers and databases, with an assortment of support network and connectivity equipment. **Figure 3** depicts one such embodiment in an environment for a Banking application. The WSP is shown to consist of an e-Commerce Server, which allows both the Wallet Clients and the Service Institutions to connect through either of the Networks as defined earlier. Whereas the e-Commerce server would handle the bulk of the interfacing with the Wallet Clients and the Service Institutions, the backend processing for support functions including Customer Service, Operations Management, Accounting, Marketing & Advertising, and various other Business Processes would be handled by a network of servers and databases. Shown as a separate entity in **Figure 3**, is the WSP Archives. This is a database of Wallet Client information, which may be accessed by the Wallet Clients through the WSP, or used by the WSP for the various service offerings. This information would include Wallet Client Profiles, Transaction and Promotion details. All three terms will be defined later in context to the WSP and the Wallet Clients. Considering the sensitivity of the information handled by the WSP, there are adequate Firewalls and other security measures provided both from a Hardware and Software perspective in the internal WSP framework. Also included in **Figure 3**, is an existing Banking environment, with a POS terminal connected to the Payment Gateway, the Acquiring Bank, which in turn is connected through an internal Banking Network to the other Banks, completing the loop through the WSP. Thus when a Wallet Client uses the Wallet for a Banking application, the transaction details would be relayed to the WSP through the loop described above. The Wallet Client may then connect to the WSP either directly or through a PC at home or work. Also shown, as part of the loop is the Wallet interface, which could be an Infrared or Proximity RF interface, over and above the conventional POS interfaces. The above description depicts one possible configuration of the WSP and the Wallet Clients.

As described earlier, Information is what Service Institutions strive for, information about their customers, their preferences, their requirements and most important their needs. Approaches like database marketing, relationship marketing, permission marketing, and loyalty programs have evolved over time with the overall objective to allow these Service Institutions to gather as much information about their potential market as possible, in turn to sell more of their goods and services. Also equally important is the Information the users require about the products and services that these Service Institutions have to offer. With the advent of the Internet and a virtual market place, there has emerged yet another powerful media for the interaction and exchange of Information. With the advent of technology fueled by the growth of the Internet, access to information has exponentially increased and the traditional guards or protectors of privacy have been let down and redefined, creating a certain sense of insecurity. Again, what has been undone, has also been “redone” by technology through the emergence of new encryption devices and algorithms, new firewalls and security, new standards and protocols for secure transactions, greatly reducing the risk of abuse and misuse. The key issue though, as inferred by many, is not the loss of privacy, but the more efficient use of information, essentially as a bargaining tool for better services and products. The users want to have a more tighter control over their personal information, allowing them the upper hand when it comes to dealing with these Service Institutions, allowing only so

much information to slip away for the product or service they desire. Eventually it is these Service Institutions that hold and consequently deliver the product or service they desire, and thus arises the issue of bargaining. Currently the upper hand lies with the Service Institutions, the sources of information about their market coming from direct or indirect surveys, buying pattern analysis, transaction records and analysis, credit ratings and bureaus, in the Internet age – through the pattern of sites visited, purchases made on the Internet, to name a few. This situation though is gradually changing, with the user restricting access to their personal information. What is emerging is the requirement of an intermediary, someone that is positioned between the user and these Service Institutions, allowing the user to maintain their anonymity, but at the same time giving them precise information regarding the product or service they desire. The key purpose of this intermediary is to eventually allow the user to make a choice amongst the various vendors for a particular product or service, without being bombarded by the vendors directly. Based on the applications supported by the Wallet and the scope of the Wallet Service Provider – the WSP in one embodiment may be considered as one such intermediary.

The client profiles created by the WSP essentially would involve information of the following nature, which would be compiled and up-dated on an ongoing basis in the interest of offering the best possible products and services to the WSP clients:

a) Personal

1. *Name*
2. *Address – Home, Work*
3. *Telephone – Home, Work*
4. *Social Security*
5. *Date of Birth*
6. *Marital Status*
7. *Drivers License, Insurance Cards, Employer Identification Cards etc.*
8. *Number of Children and other family details*

b) Financial

1. *Credit Card, Debit Card, Cash Cards etc.*
2. *Income – Information regarding various sources etc.*
3. *Bank Accounts – Information regarding the different Banks, the different types of accounts, Balances etc.*
4. *Payment Information – Mortgages, Loans, Bills etc.*
5. *Investment Information – Stocks, Bonds, Equity, Real Estate etc.*
6. *Transaction Information – Amounts, Form of Payment, Date of Transactions, Details on Purchases etc.*

c) Health

1. *Gender, Height, Weight, Blood Group, Color – Hair, Skin, Eyes etc.*
2. *Medical Profile – Detail information regarding past and present medical history which would include various surgeries done, special medication subscribed, past sicknesses and ailments, allergies, ongoing medication and treatment, hereditary or genetic concerns, family history, etc.*

3. *Name and other contact details of doctors – Personal Physicians, Specialists etc.*
4. *Name and other details regarding the Clinics, Hospitals, Emergency Services and Laboratories previously visited, and/or preferred for future needs*

d) Miscellaneous

1. *Preferences – Likes and dislikes, certain products and services required on an ongoing basis etc.*
2. *Insurance providers, Telephone companies – local, long distance and wireless, Hotels, Airlines, Auto Rental companies, Retail outlets and Merchants, Club Memberships – previously used and/or preferred for future needs*
3. *Family details, Birth dates etc.*

The various services and products offered by the WSP, either independently or through one of the partnering Service Institutions (e.g. one differentiation could be in terms of a MasterCard credit card application downloaded by a Wallet Client by applying to Citibank, which may be assumed to be a WSP partnering Service Institution, and an independent service offered by the WSP of archiving all the transaction records and offering specific analytical consultations based on the history of transactions) may be categorized as follows:

a) Personal Services

1. *Privacy: The WSP guarantees the absolute confidentiality of all information they have access to about their clients. Controlled and partial access to this information would only be given to the Service Institutions on prior consent by the user to fulfill a specific objective, such as conducting a purchase or obtaining a service on behalf of the WSP client.*
2. *Shielding: Shielding services include restricting and controlling access to the clients, from the various Service Institutions for purposes of mass marketing etc.*
3. *New Wallet: The WSP will issue a new wallet to their client. Issuing a New Wallet would include issuing the Wallet hardware and/or setting up the various interfaces and applications for the Wallet Client, which in turn would include the registration of the new client, creation and storage of passwords etc.*
4. *Issue Card: The WSP will activate specific Cards. The application for new cards from the issuing banks and financial institutions may be provided by the WSP, or alternately by the issuing financial institution. Once the application has been approved by the issuing financial institution, the specific card(s) may be downloaded from the WSP*
5. *Remove Card: Removing a particular Card (and freezing the various services associated with that particular Card) from the Wallet*
6. *Lost Wallet: Freezing all services in the event of a lost wallet*
7. *Resume Services: Setting up a new wallet and resumption of the services*
8. *Remove Wallet: Terminate services*
9. *Awards & Promotions: Offering and allowing the client to download various awards and promotions based on their transactions and records. These promotions could be offered directly by the Service Institutions or could be independent of the promotions offered by the various Service Institutions and offered directly to the clients by the WSP.*

10. *Pay Bills: The WSP would pay the clients bills, based on an independent arrangement. This arrangement at times may be in terms of offering a better interest rate and payment plan compared to the Service Institutions, an insurance plan against unemployment, theft etc. or simply a service for their clients convenience.*
11. *Transaction Records & Data Management: Creating an archive of transaction records, and allowing access to the WSP clients, Data-Mining services etc.*
12. *Analysis & Consultation Services: Offering WSP clients analysis and consultations based on their transaction records and history, e.g. professional services such as tax and accounting services*
13. *Grouping Services*

b) Financial Services

1. *Banking Services: E-Banking, E-Cash, E-Check, Bill payments, Loans, Mortgages, Tax Services*
2. *Retail Services: Credit Cards (MasterCard, Visa, American Express, Discover, Diners Club etc.), Purchases, Loyalty, Rewards*
3. *Investment Services: Stocks, Bonds, Portfolio Management*
4. *Insurance Services: Auto, Home, Life, Business*

c) Shopping & Purchasing Services – “Customer Agent”

*Matching Services include matching up a clients specific requirement, with the various vendor or Service Institutions offerings, e.g. if a client wishes to buy a refrigerator, the WSP would be notified by the client. The WSP would then contact the various vendors that sell refrigerators and collect the information for the client, in turn suggesting the best possible bargain for the client in terms of the preferences detailed by the client, with an emphasis on cost, features, warranty etc. This service would be extended to all products and services offered by the partnering Service Institutions. Thus the WSP acts as the **Customers Agent**, conducting purchases on behalf of the client without revealing the clients identity to the Service Institution until the actual purchase is finalized.*

1. *Identifying*
2. *Purchasing*
3. *Negotiating – Bulk discounts etc., Custom design and requirements*
4. *Analytic Service: Consumer reports, independent reports and analysis etc.*

d) Health Services

1. *Health Profile, History and Data*
2. *Hospital Interactions for the purposes of updating medical history, bill payments, medical insurance etc.*
3. *HMO*
4. *Emergency Services – Ambulance, Personal Physician etc.*
5. *Insurance Companies*
6. *Drug Stores & Pharmacies*

e) Miscellaneous Services

1. *Government Services: DMV, Passports and Visas, IRS and Tax related services, Social Security and Welfare etc.*
2. *Educational Services: School and College related information –registration, course selection, tuition payment plans and arrangements, library resources etc.*
3. *Telecom Services: Service provider selection, Net Access, Billing and Conflict resolution, Custom Services etc.*
4. *Transportation, Lodging & Boarding Services: Gas, Parking, Toll, Violation/Ticket Payments, Car rentals – reservations, payments, coupons etc., Airline Services – Reservations, Ticketing, Check In, Frequent Flier and Bonus Miles etc., Hotel Reservations, Restaurant – Suggestions and Reservations*
5. *Special Events*

Thus based on the profile created and various services offered by the WSP, the WSP is in the unique position to safeguard the interests of the clients by isolating their identity from the Service Institutions, and at the same time giving them access to the products, services, promotions and advertising they desire.

The WSP also addresses the interests of the Service Institutions. Again, since the WSP is in the unique position, where it controls the information surrounding its clients, it can offer the Service Institutions the following services:

a) Customer Acquisition Services

Since the WSP would have a very comprehensive profile on their clients, they are in the unique position to offer vendors a steady flow of customers for their products and services. Considering the time and resources the Service Institutions commit to develop a loyal customer base, this service would prove invaluable.

b) Target Marketing Services

The WSP is also in a position to assist the Service Institutions in targeting their marketing efforts based on the client profile information the WSP has access to, considerably reducing the efforts directed towards “non-existing” markets by the Service Institutions and increasing their overall profitability.

c) Marketing Research Services

Based on the fact that the WSP has a comprehensive profile on their clients, which includes detail preferences, likes-dislikes etc., the WSP can assist their partnering vendors in developing better products and custom tailored services.

d) Inter-Vendor Collaboration Services

Apart from a large client base, the WSP will also have a large number of Service Institutions as registered members, with a comprehensive profile on their products and services. This would allow the WSP to act as a “catalyst” for the Service Institutions for the purposes of forming alliances, mergers or possibly even acquisitions, to offer better products and services to their customers.

The above service categories offered by the WSP to their clients and Service Institutions are shown in **Figure 4**.

Considering the sensitivity surrounding the nature of Information regarding their clients and Service Institutions the WSP will have access to, it is of paramount importance that there is absolute confidentiality maintained. The only information released by the WSP to the Service Institutions regarding the clients, will be pre-approved by the clients, and with the objective of providing a better product or service. This information surrounding the clients may essentially be distributed into three categories:

a) Profiles

This is the information compiled by the WSP on their clients through direct means – interactive questionnaires, surveys, interviews, through pre-approved external agencies etc.

b) Transaction Records Analysis

This is the information compiled by the WSP through analysis of their client records, buying patterns and frequency, preferences based on these analysis etc.

c) Preferences

This is the information compiled by the WSP through preferences, like and dislikes etc. specified by the client.

Figure 5 outlines one possible embodiment of the WSP system dealing with the client side information consolidation process. The client (Wallet Clients or other “Non-Wallet” clients) will connect to the WSP through the Network. Information regarding the client is collected as detailed above. The information forming the input to an expert system, which deals with Client Data Consolidation, may be categorized as:

- a) Registration & Initialization Information
- b) Client Profile Information
- c) Transaction & Records Analysis Information
- d) Specific Flags, such as Privacy and Secrecy Specifications, Special Preferences etc., Information

The source and collection of the above information inputs has already been discussed in the previous sections. Apart from these inputs, the other information being fed into the Client Data Consolidation expert system would come in the form of specific instructions directly from the client, and as a consolidated input from the Service Institutions. For instance, the Registration Information would be compiled based on surveys and interviews, the complete Client Profile compiled using information from external agencies, over and above the direct information provided by the clients. The Transaction and Records Analysis conducted by the WSP would be offered as a service to the client in the desired form and format, and would also be fed back into the expert system to form an input to the overall service offerings to the clients by the WSP. The Specific Flags and direct input by the clients form the preferences outlined by the clients. The consolidated input from the Service Institutions, the source of which will be discussed in the following section, would be information about the vendors that would affect the overall client profile, and consequently the services offered to the clients. The output of this Client Data Consolidation System would form an input to the knowledge-based system of the WSP, which would eventually decide the services being offered to the Clients and the Service Institutions. As shown in the Figure, the Client Data Consolidation System and Process is kept isolated from the other processes to ensure the confidentiality of the information surrounding the clients.

Figure 6 outlines one embodiment of the Service Institutions Data Consolidation process. An expert system collects and assembles a complete profile on the Service Institutions through various sources, which may be categorized as:

- a) Service Institution Profile Information
- b) Service Institution Products & Services Information
- c) Service Institution Marketing & Advertising Information
- d) Information in terms of Future Releases of Products and Services – “Future Attractions”

This information would be compiled from the Service Institutions, the complete Profile forming an input to the knowledge-based system, which would eventually determine the services offered to the client and Service Institutions. Two sources which form a direct input to the knowledge-based system are the services and products subscribed by the clients which the Service Institutions are committed to provide directly to the clients (e.g. Credit Card services – If a client has applied to Citibank for a MasterCard, Citibank is obligated to provide this service to the client. The interfaces for this credit card would be downloaded onto the Wallet by the client from the WSP, the WSP handling the initiation, registration and maintenance of the account, tracking and storing all transactions, and thus forming the intermediary as discussed before between Citibank and the clients), and the other input source being the promotions, awards offered by the Service Institutions directly to the clients (e.g. Frequent flyer miles offered by American Airlines to a WSP client). Again, this processing environment would be kept isolated from the other WSP processes.

Figure 7 shows the complete system, at the center of which is the knowledge-based system, which essentially operates based on the various inputs it receives and the guidelines defined by the WSP charter. The various inputs to the knowledge based system now include the output of the Client Data Consolidation & Service Institution Data Consolidation expert systems, the respective Archives which store all the relevant Client Data and Service Institution Data, a Customer Service Input which handles all direct requests from the clients, all Security guidelines ensuring confidentiality and the Services and Products, along with the Benefits and Promotions offered by the Service Institutions directly to the clients. The output of the knowledge-based system determines the various services offered by the WSP to the clients and to the Service Institutions as outlined in Figure 4, and discussed in detail in the previous sections. The WSP will also offer promotions and awards based on client transaction records, allowing their clients and Service Institutions to download these awards along with other ongoing services and products.

Figure 8 outlines a Client Interaction Flow Chart. As mentioned earlier, the Wallet (or UET Card) may be used to interface with the WSP and various Service Institution POS Terminals, other Terminal equipment etc. Alternately, any hand held computer or palmtop computer with the functionality of the Wallet may be used to avail the services offered by the WSP.

Figure 9 outlines a Service Institution Interaction Flow Chart.

Figure 10 outlines a WSP service flow. The flow chart makes certain assumptions, one of which is that the Client wishes to use a Wallet provided by the WSP. The example also makes the assumption that the Client wishes to apply for a MasterCard credit card offered by Citibank, and that the Client wishes to purchase a “Refrigerator”. A refrigerator is used merely as an example, the service flow would essentially remain the same for any other product or service offered by the WSP.

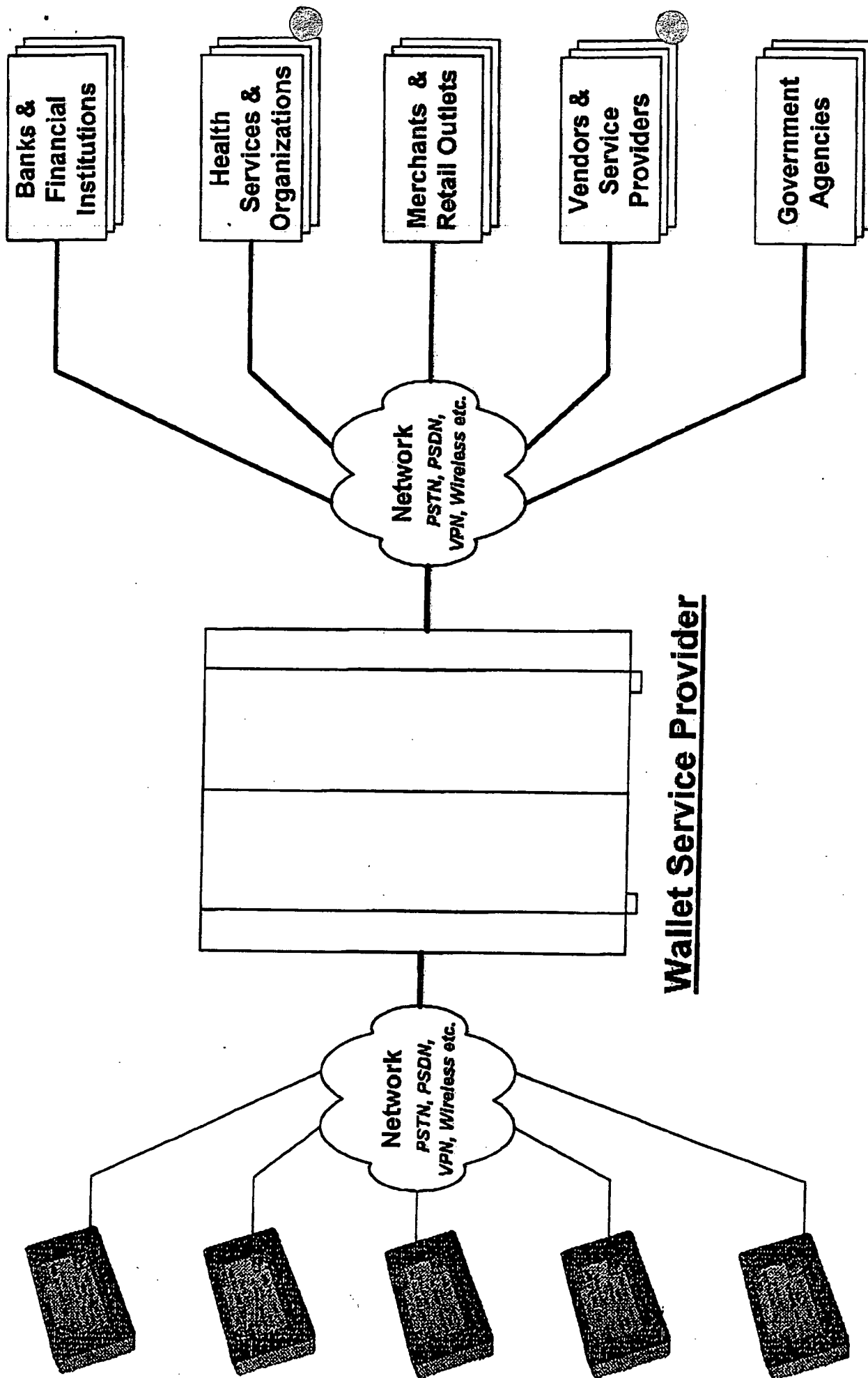


FIGURE 1

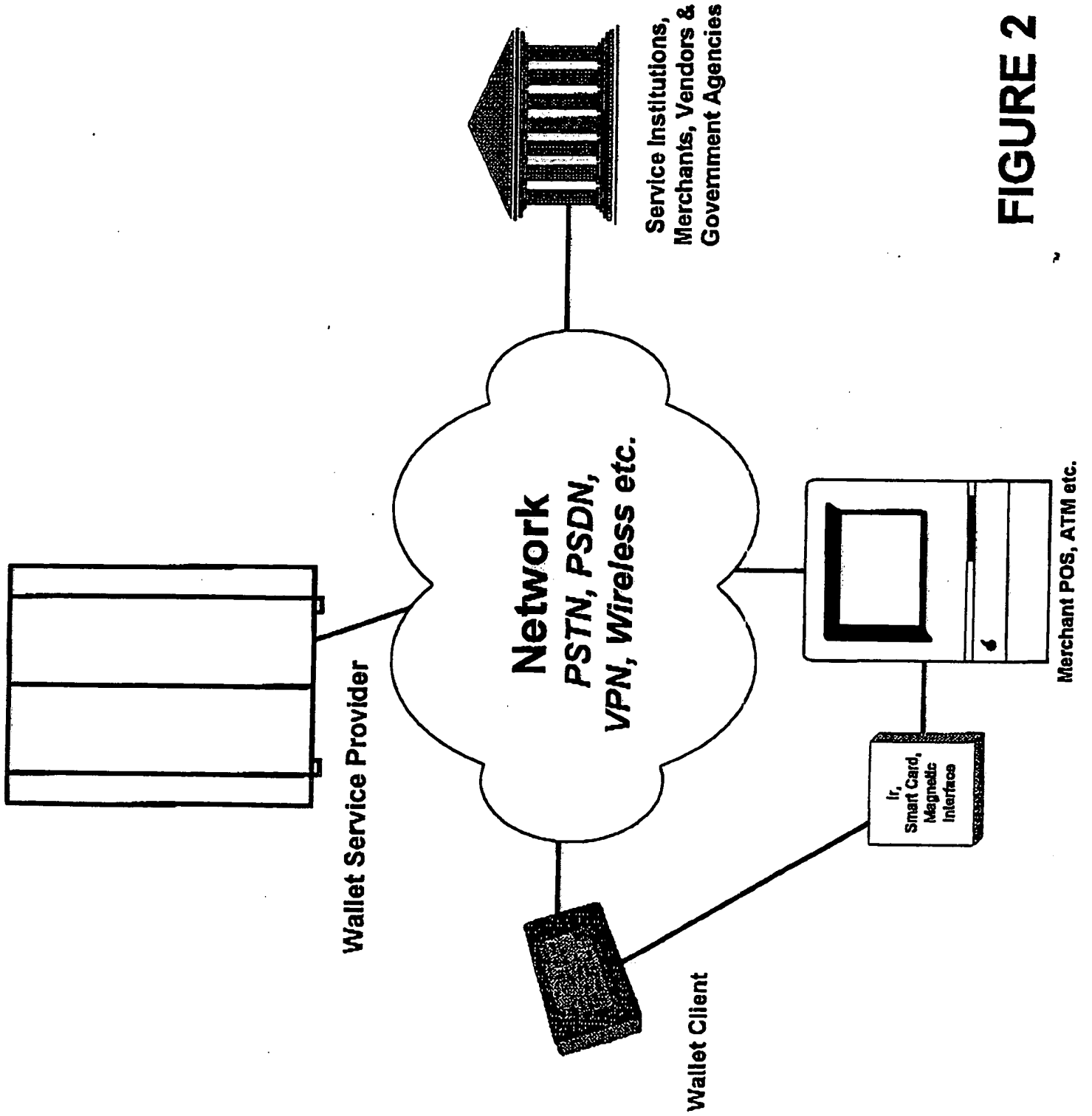


FIGURE 2

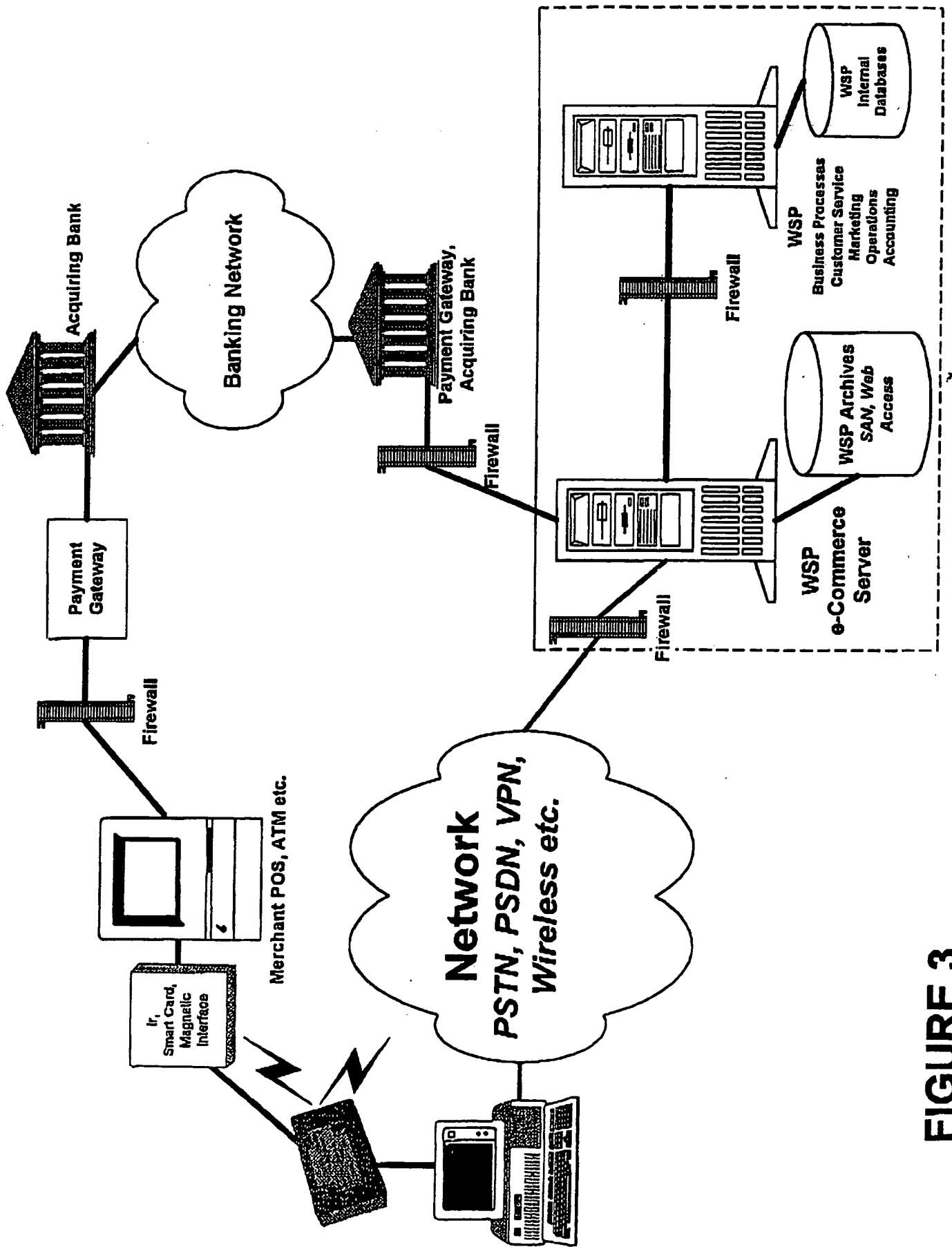
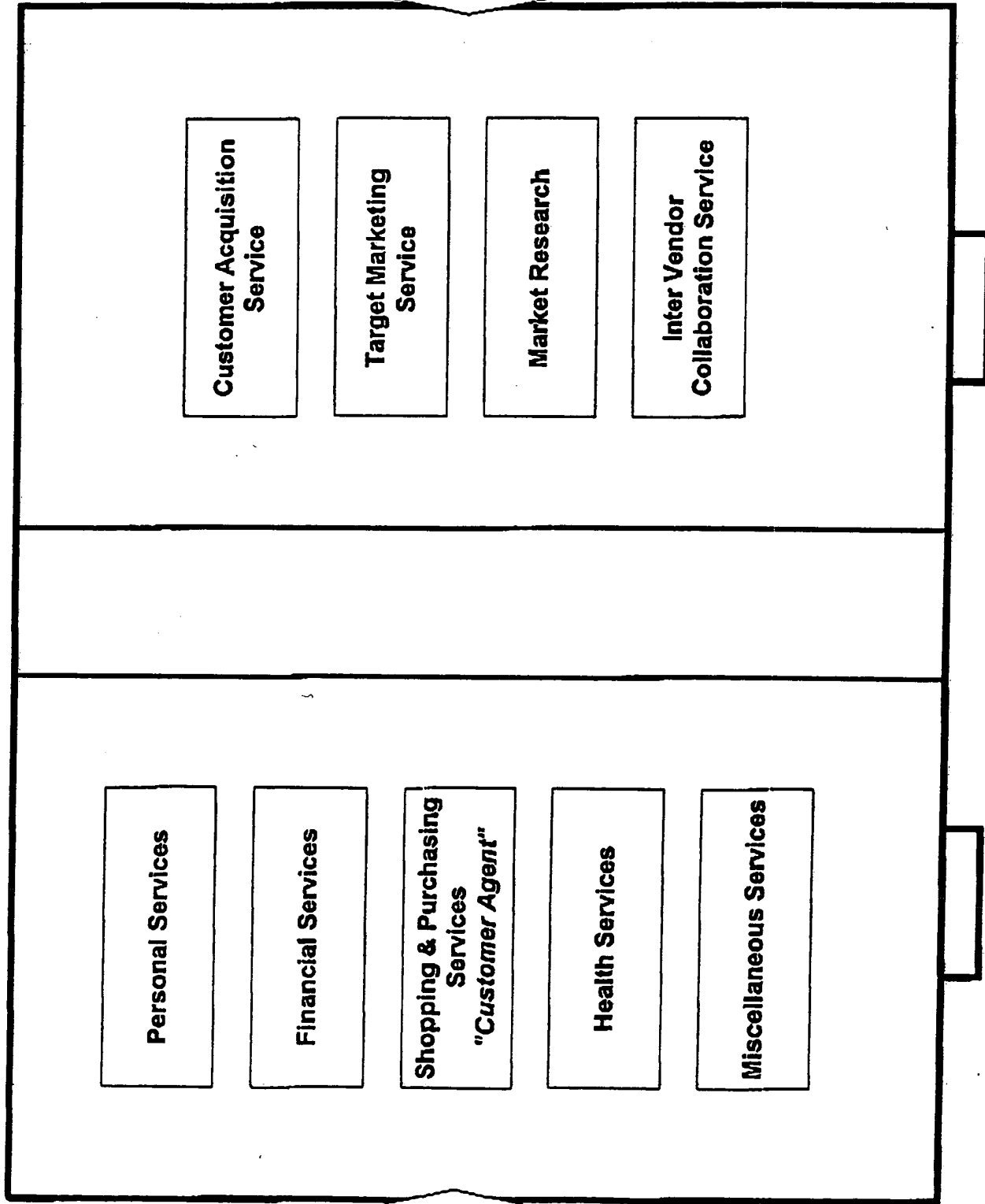
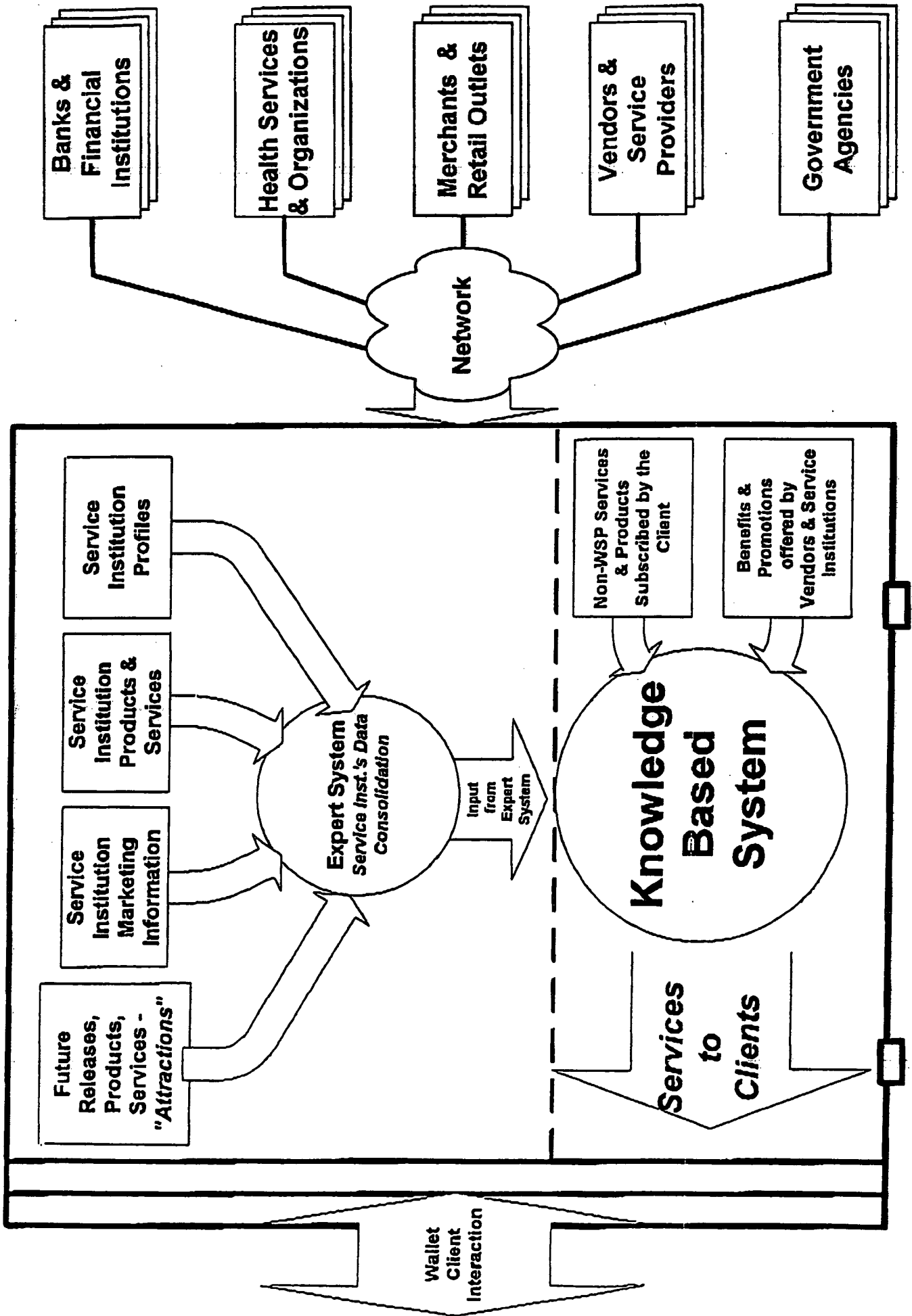


FIGURE 3



Wallet Service Provider

FIGURE 4



Wallet Service Provider

FIGURE 6

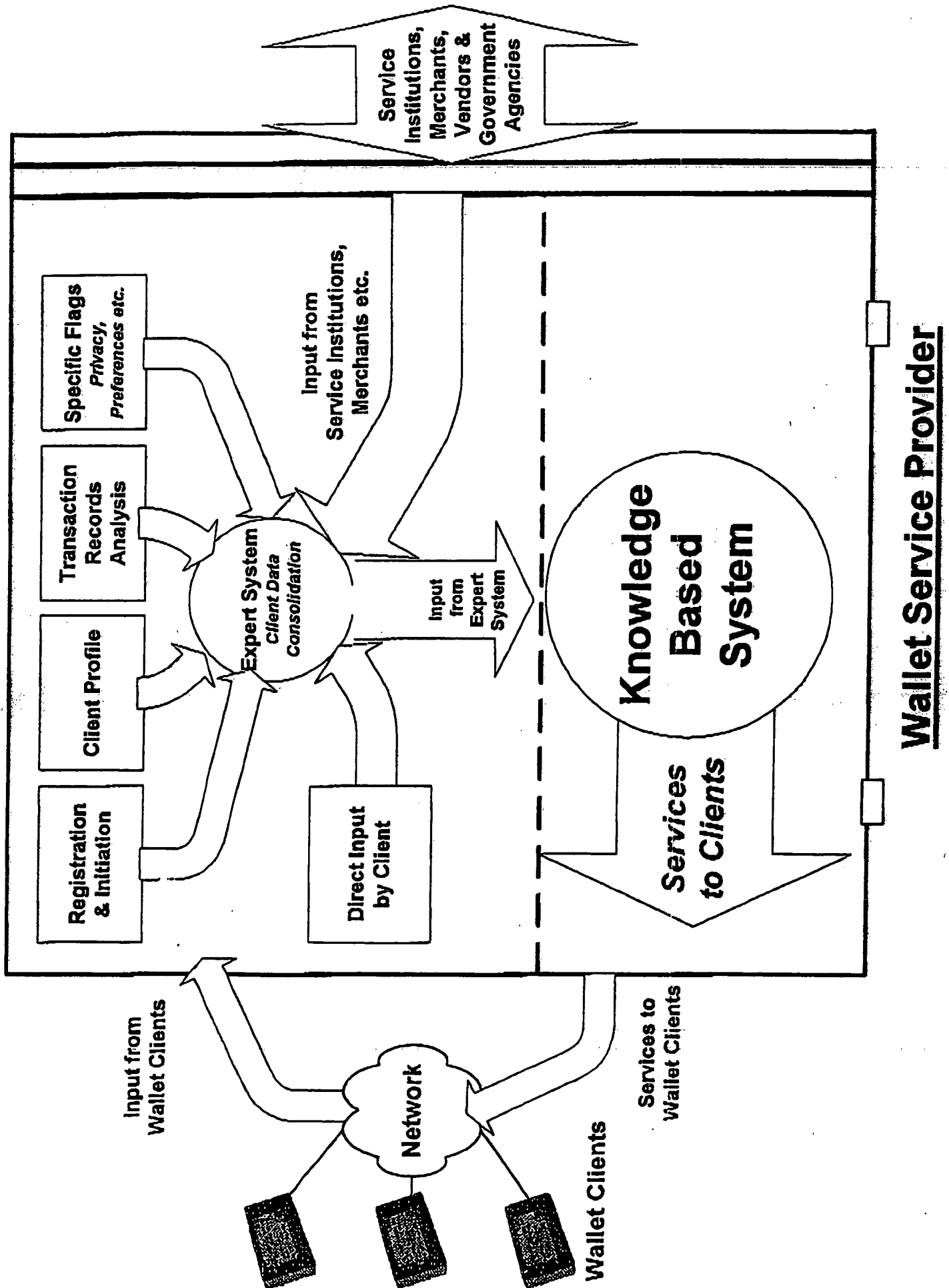
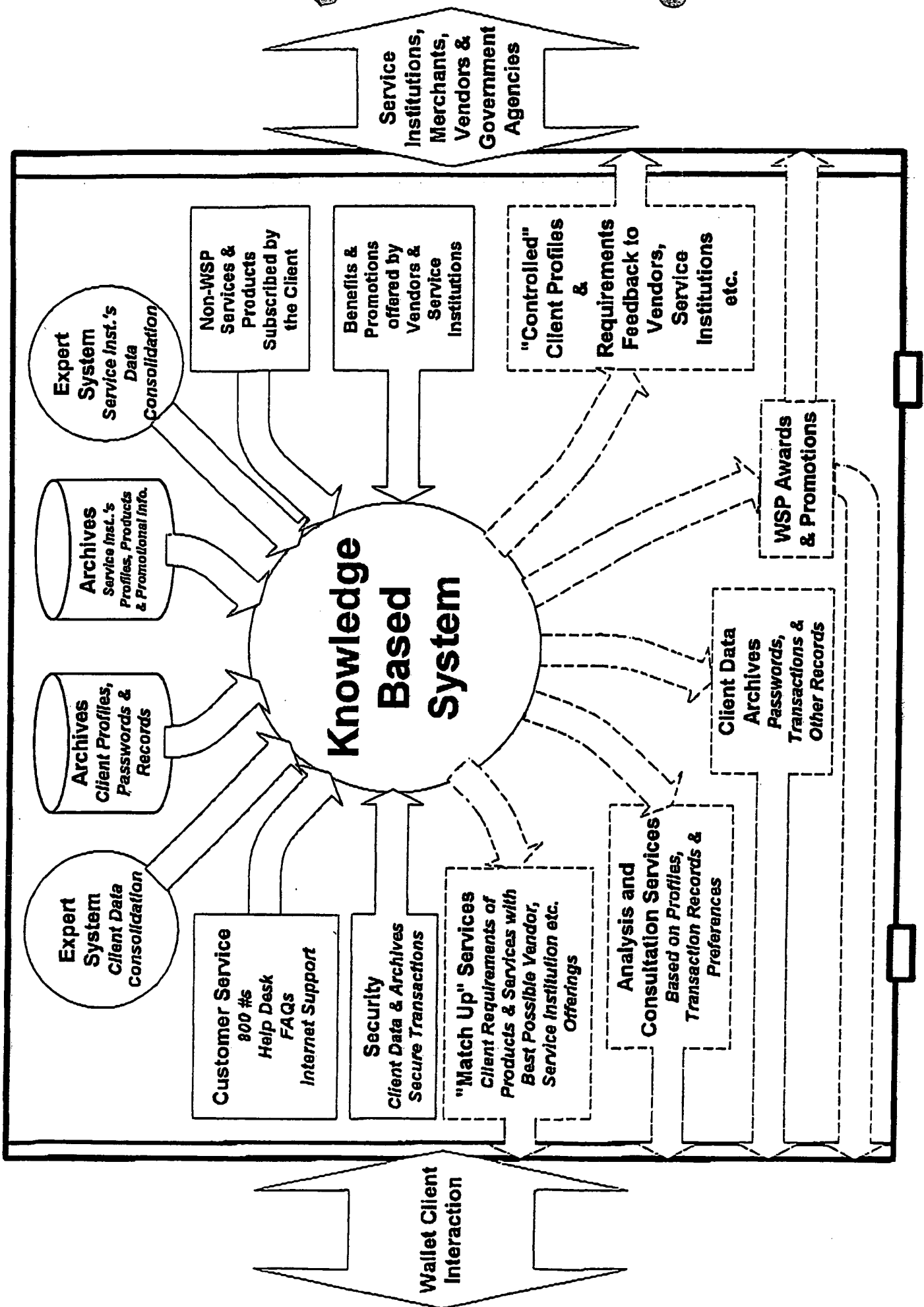


FIGURE 5

**Wallet Service Provider****FIGURE 7**

Client Interaction Flow Chart

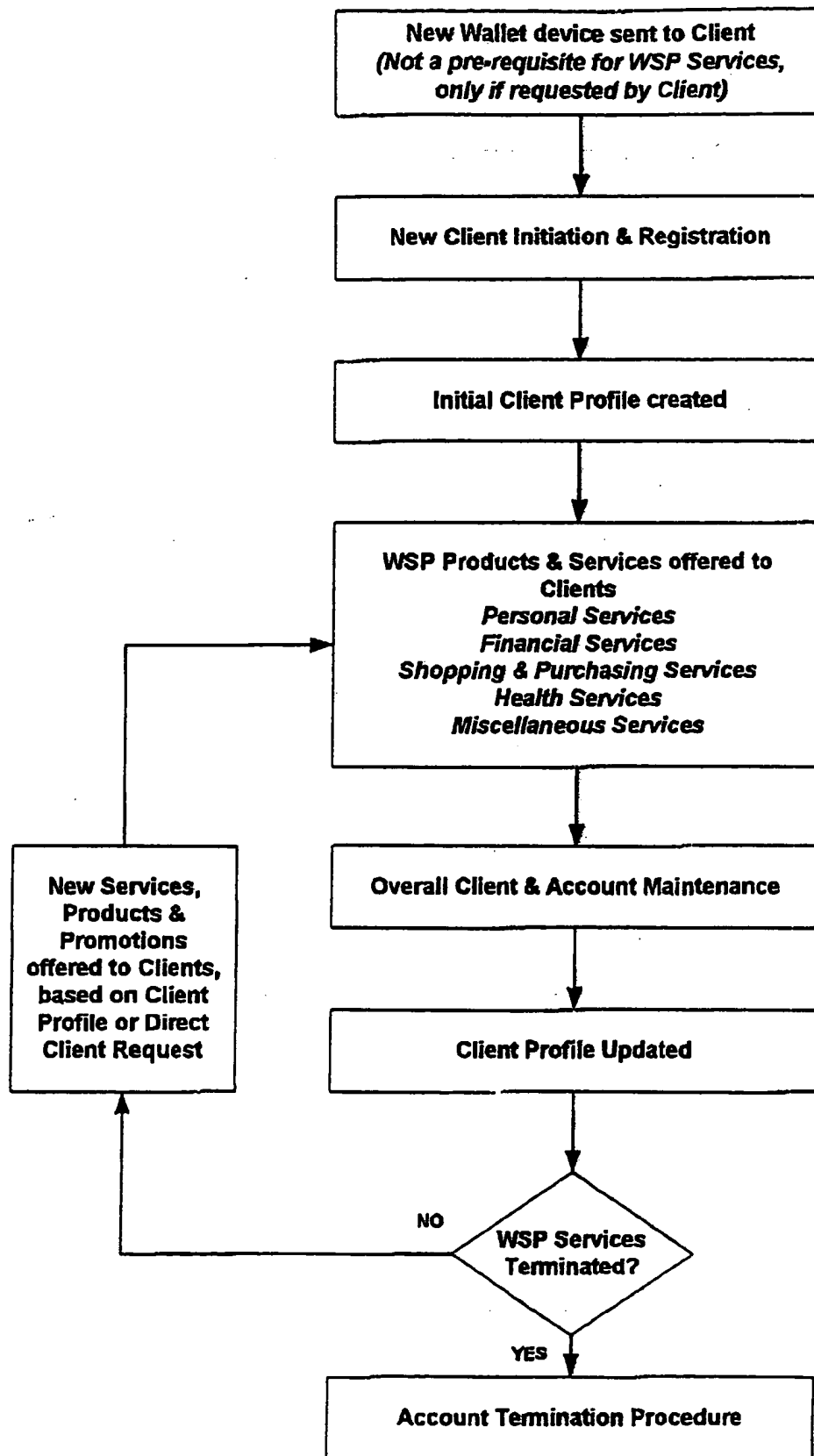


FIGURE 8

Service Institution Interaction Flow Chart

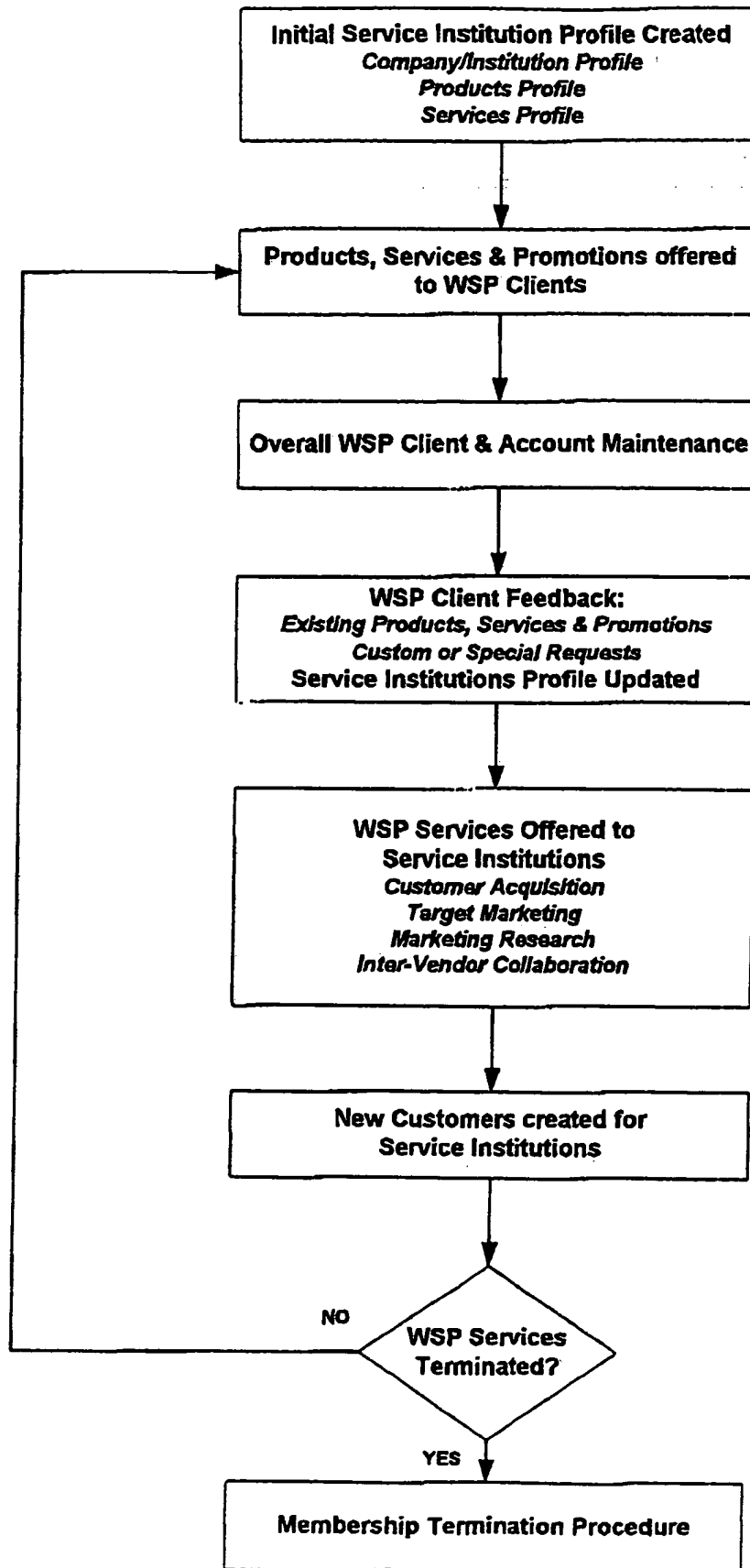


FIGURE 9

WSP Service Example

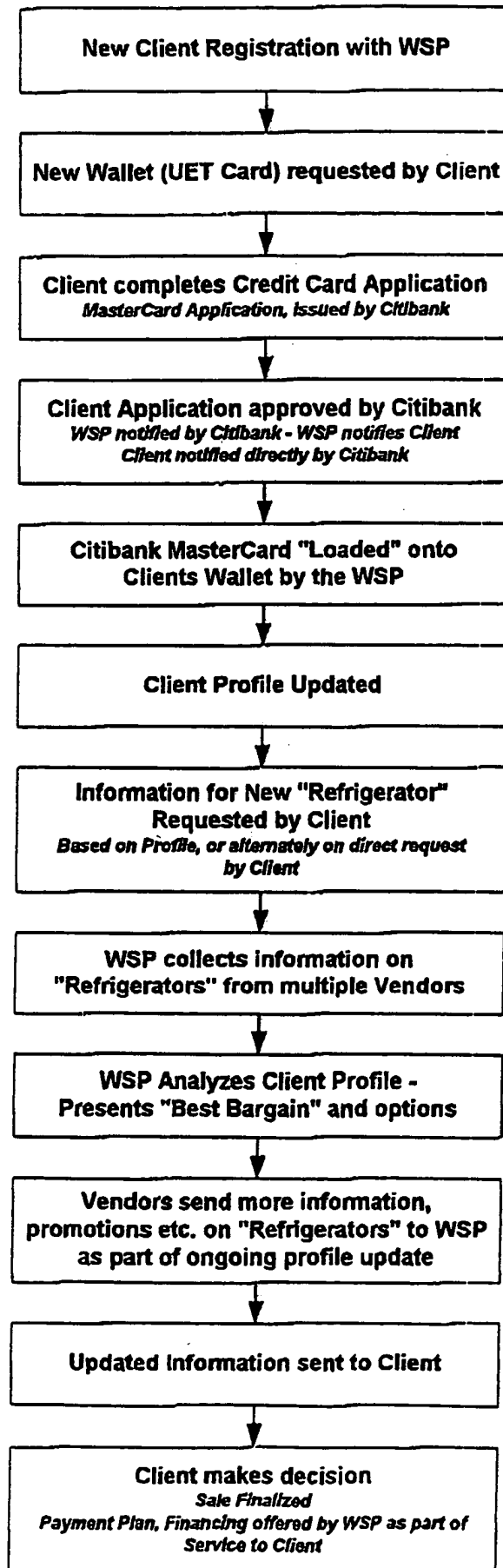


FIGURE 10

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